



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,054	12/16/1999	DAVID BURTON	990326.ORI	8408

7590 05/16/2006

John F. Klos
Fulbright & Jaworski LLP
80 South 8th Street
Suite 2100
Minneapolis, MN 55402

EXAMINER

MITCHELL, TEENA KAY

ART UNIT	PAPER NUMBER
----------	--------------

3743

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 09/465,054	Applicant(s) BURTON, DAVID	
	Examiner Teena Mitchell	Art Unit 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32 and 57-83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32 and 57-83 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 3/3/06 have been fully considered but they are not persuasive.

In response to Applicant's arguments regarding Brown, it should be noted that the Examiner is relying on the Brown reference for the teaching of a headgear having mounted thereon sensors. The Examiner is not relying on the Brown reference for a teaching of EEG sensors. As such, Applicant's arguments with respect to Brown are rendered moot. (Also note the extrinsic evidence of EEG sensors disclosed upon a headpiece by Freer 6,097,981; such disclosure shows that it is known in the art to place EEG sensors upon a head of a user as EEG is used to detect brain activity).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 32, 57-61, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miles (US 5,353,788) in view of Brown (US 6,000,395). (Also

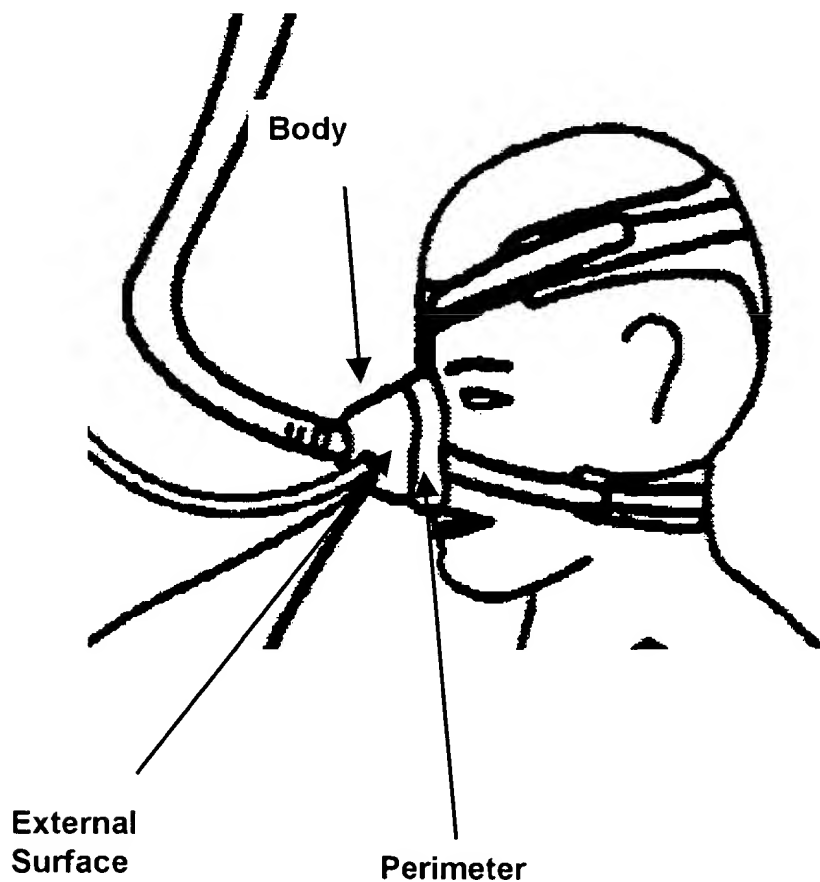
Art Unit: 3743

note the extrinsic evidence of EEG sensors disclosed upon a headpiece Freer 6,097,981; such disclosure shows that it is known in the art to place EEG sensors upon a head of a user as EEG is used to detect brain activity).

With respect to claim 32, Miles discloses a breathing mask (3, 26) for monitoring a patient during gas delivery comprising a body (See Fig. 2, attachment below) having an internal surface (inherent from Fig. 2, attachment below, since mask is shown to be cupping the nose), an external surface (See Fig. 2 attachment below), and a perimeter surface (See Fig. 2 attachment below) shaped to form a seal around patient's nose; and at least one EEG sensor (See Col. 4, lines 33-35; lines 44 and 45; lines 55-59; Col. 5, lines 6-15; and Col. 7, lines 37-51 which disclose a plurality and variety of sensors including an EEG sensor and further discloses that the sensors may be mounted inside the mask or connected to the mask thereby reading on the limitation "extended from the mask"; it should also be noted that the physiological specific sensor is located on the respective/corresponding anatomy as shown in Fig. 2 and therefore, it would have be obvious to one of ordinary skill in the art to place an EEG, which inherently measures/detects brain activity near or on the head and away from the mask in order to get a more precise reading) extended from the mask and positioned to detect brain activity. Miles teaches essentially all of the limitations except for a headgear adapted to retain the body on the head, the headgear having at least one EEG sensor positioned thereon. Brown teaches the use of a headgear with sensors placed strategically thereon so that the particular bodily condition of the user may be sensed. Therefore, it

Art Unit: 3743

would have been obvious to one of ordinary skill in the art to provide a headgear in the breathing mask of Miles so that the specific body sensors such as an EEG sensor may be placed strategically on the appropriate anatomy of the human being to sense that specific bodily condition as taught by Brown. Furthermore, it would have been obvious to one of ordinary skill in the art that an EEG sensor be placed on or near the head to detect the appropriate signal and as such it would have been further motivation to provide the EEG sensor on a headgear type device (as taught by Brown) to hold the sensors in place in conjunction with the mask.



With respect to claim 57, the above combination teaches a breathing mask wherein the headgear is a cap (It should be noted that Brown teaches a headgear that is a cap).

With respect to claim 58, the above combination teaches essentially all of the limitations except for wherein the perimeter surface is adapted to detect ECG. Miles does disclose ECG lead (6, Fig. 2) placed over a patient's heart/chest area. However, it should be noted that Miles also discloses that some of the sensors may be mounted inside or connected to the mask (See Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention and based on the disclosure by Miles that the sensors, including one that detects ECG, may be placed inside the mask or connected to the mask (a perimeter surface is encompassed by the disclosure) to provide an alternative placement of the sensor.

With respect to claim 59, the above combination teaches essentially all of the limitations except for further comprising a flow sensor connected to the internal surface. Miles discloses an airflow sensor (See Col. 4, lines 33-35 and Col. 5, lines 20 and 21). It should be noted that in Col. 5, lines 20 and 21, Miles discloses a flow sensor contained within the CPAP device; however, Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made and based on the disclosure of Miles that the sensors, including a

Art Unit: 3743

flow sensor may be placed inside the mask or connected to the mask thereby providing an alternative placement of the sensor.

With respect to claim 60, the above combination teaches essentially all of the limitations except for a breathing mask further comprising an oxygen saturation sensor extended from the mask. Miles discloses an oxygen saturation sensor (5) but the oxygen saturation sensor of Miles is placed on a finger rather than extending from the mask (Fig. 2). However, Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based on the disclosure by Miles that the sensors, including an oxygen saturation sensor, may be placed inside the mask or connected to the mask thereby reading on the limitation "extended from the mask" and thus providing an alternative placement of the sensor.

With respect to claim 61, the above combination teaches essentially all of the limitations except for wherein the perimeter surface is adapted to detect eye movement. Miles discloses a sensor that detects eye movement (Col. 4, lines 33-37). Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based on the disclosure by Miles that the sensors, including a sensor that detects eye movement, may be placed inside the mask or connected to the mask (a perimeter surface is encompassed by the disclosure) to provide an alternative placement of the sensor.

With respect to claim 77, Miles discloses a breathing mask (3, 26) for monitoring a patient during gas delivery comprising a body (Fig. 2, above) having an internal surface (inherent from Fig. 2 above since the mask is shown to be cupping the nose), an external surface (Fig. 2 above), and a perimeter (Fig. 2 above) shaped to form a seal around the patient's nose; at least one EEG sensor (Fol. 4, lines 33-35; lines 44 and 45; lines 55-59; Col. 5, lines 6-15; and Col. 7, lines 37-51 which disclose a plurality and variety of sensors including an EEG sensor and further teach that the sensors may be mounted inside the mask or connected to the mask and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to couple the EEG sensor to the body as providing an alternative placement for the sensors, which sensor would be capable of being positioned on a top portion of a patient's head upon application of the body to a patient). Miles discloses essentially all of the limitations except for a headgear adapted to retain the body on the patient's head, the headgear having at least one EEG sensor positioned thereon. Brown teaches the use of a headgear with sensors placed strategically thereon so that the particular bodily condition of the user may be sensed. Therefore, it would have been obvious to one of ordinary skill in the art to provide headgear in the breathing mask of Miles so that specific body sensors such as EEG sensor may be placed strategically on the appropriate anatomy of the human being to sense that specific bodily condition as taught by Brown. Furthermore, it would have been obvious to one of ordinary skill in the art that an EEG sensor be placed on or near the head to detect the appropriate signal and as such it would have been further motivation to provide the EEG sensor on a headgear type

Art Unit: 3743

device to hold the sensors in place in conjunction with the mask. (Also note the extrinsic evidence of EEG sensors disclosed upon a headpiece by Freer 6,097,981; such disclosure shows that it is known in the art to place EEG sensors upon a head of a user as EEG is used to detect brain activity).

Claims 62-66, 68, 69, 70, 71, 73-76, and 79-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miles (5,353,788) in view of Brown (6,000,395).

Miles discloses a nasal ventilation mask (3, 26) comprising a body (Fig. 2 above) having an internal surface (inherent Fig. 2 above, since the mask is shown to be cupping the nose), an external surface (Fig. 2 above), and a perimeter surface (Fig. 2 above) adapted to form a seal around a patient's nose (Fig. 2 above), an air hose (2) extending from the body; and at least one EMG sensor (chin, Col. 7, lines 39 and 40). It should be noted that Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention and based upon the disclosure of Miles that the sensors, including the EMG (chin) sensor, may be placed inside the mask or connected to the mask thereby providing an alternative placement of the sensor and thus be capable of detecting muscle activity relating to a sleep state as recited. Miles discloses essentially all of the limitations except for a headgear adapted to retain the body on the patient's head, the headgear having at least one EEG sensor positioned thereon. Brown teaches the use of a headgear with sensors placed strategically thereon so that the particular bodily condition of the user may be sensed. Therefore, it would have been obvious to one of ordinary skill in the art to provide a

Art Unit: 3743

headgear in the breathing mask of Miles so that the specific body sensors such as an EEG sensor may be placed strategically on the appropriate anatomy of the human being to sense that specific bodily condition as taught by Brown. Furthermore, it would have been obvious to one of ordinary skill in the art that an EEG sensor be placed on or near the head to detect the appropriate signal and as such it would have been further motivation to provide the EEG sensor on a headgear type device (as taught by Brown) to hold the sensors in place in conjunction with the mask.

With respect to claim 63, Miles discloses essentially all of the limitations including a first sensor for detecting nasal breathing (Col. 5, lines 12-14) and a second sensor for detecting oral breathing (Col. 7, lines 41 and 42) except for the location of the sensors. Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based on the disclosure by Miles that the sensors, including a sensor that detects eye movement, may be placed inside the mask or connected to the mask (a perimeter surface is encompassed by the disclosure) to provide an alternative placement of the sensor.

With respect to claim 64, Miles discloses a mask wherein the first and second sensors are thermal sensors (Col. 5, lines 12-14 and Col. 7, lines 41 and 42).

With respect to claim 65, Miles discloses essentially all of the limitations including an EEG sensor (Col. 4, lines 33-35; lines 55-59; Col. 5, lines 6-15; and Col. 7, lines 37-51) except for the EEG sensor positioned on the perimeter surface. However, Miles also discloses that some of the sensors may be mounted inside or connected to the

Art Unit: 3743

mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based upon the disclosure by Miles that the sensors, including an EEG sensor, may be placed inside or connected to the mask (a perimeter surface is encompassed by the disclosure) to provide an alternative placement of the sensor.

With respect to claim 66, Miles discloses essentially all of the limitations including an EOG sensor (Col. 4, lines 36 and 37; lines 55-59; and Col. 7, lines 39) except for the EOG sensor positioned on the perimeter surface. However, Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based upon the disclosure by Miles that the sensors, including an EOG sensor, may be placed inside or connected to the mask (a perimeter surface is encompassed by the disclosure) to provide an alternative placement of the sensor.

With respect to claim 68, Miles discloses essentially all of the limitations including a plurality of straps (Fig. 2) except for the straps having at least one sensor positioned thereon. However, Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based upon the disclosure by Miles that the sensors, may be placed inside or connected to the mask (the straps being connected to the mask) to provide an alternative placement of the sensor.

With respect to claim 69, Miles discloses essentially all of the limitations including a position sensor (Col. 4, line 58 which discloses overall physical movement which the Examiner considers equivalent to a position sensor since a position sensor would detect any movement or lack thereof; Col. 7, lines 46-49) except for the position sensor positioned on the perimeter surface. However, Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based upon the disclosure by Miles that the sensors, may be placed inside or connected to the mask to provide an alternative placement of the sensor.

With respect to claim 70, Miles discloses essentially all of the limitations including a microphone (Col. 7, lines 42 and 43) except for the microphone coupled to the body. However, Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based upon the disclosure by Miles that the sensors, including the microphone which would sense breathing and snoring, may be placed inside or connected to the mask to provide an alternative placement of the microphone.

With respect to claim 71, Miles discloses essentially all of the limitations including a sensor to detect air leaks (Col. 4, lines 35, 36, and 56; Col. 5, lines 22-31; Col. 7, lines 41-44 disclose an airflow sensor and a pressure sensor which would indirectly sense air leaks should there be a pressure drop which would also effect the airflow) except for the location of such a sensor on the perimeter surface. However, Miles also discloses that

Art Unit: 3743

some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based upon the disclosure by Miles that the sensors, including one which senses air leaks via airflow or pressure sensor, may be placed inside or connected to the mask (a perimeter surface is encompassed by the disclosure) to provide an alternative placement of the sensor.

With respect to claim 73, Miles discloses a nasal ventilation mask (3, 26; Fig. 2 above) adapted to form a seal around a patient's nose (Fig. 2 above), an EEG sensor (Col. 4, line 59 and Col. 7, line 39). Miles discloses all of the limitations except for a headgear adapted to retain the body on the patient's head, the headgear having at least one EEG sensor positioned thereon. Brown teaches the use of a headgear with sensors placed strategically thereon so that the particular bodily condition of the user may be sensed. Therefore, it would have been obvious to one of ordinary skill in the art to provide headgear in the breathing mask of Miles so that specific body sensors such as EEG sensor may be placed strategically on the appropriate anatomy of the human being to sense that specific bodily condition as taught by Brown. Furthermore, it would have been obvious to one of ordinary skill in the art that an EEG sensor be placed on or near the head to detect the appropriate signal and as such it would have been further motivation to provide the EEG sensor on a headgear type device to hold the sensors in place in conjunction with the mask. (Also note the extrinsic evidence of EEG sensors disclosed upon a headpiece Freer 6,097,981; such disclosure shows that it is known in

the art to place EEG sensors upon a head of a user as EEG is used to detect brain activity).

With respect to claim 74, Miles discloses a mask (3, 26) further comprising a computer (25) in communication with the sensor, the computer adapted to determine arousal (Col. 4, lines 32-66; please note the Examiner considers overall physical movement, leg movement, eye movement, EEG all to detect some form of arousal).

With respect to claim 75, Miles discloses a mask (3, 26) further comprising a computer (25) in communication with the sensors, the computer adapted to determine sleep state (Col. 4, lines 32-66; please note the Examiner considers breathing sounds, overall physical movement, leg movement, eye movement, EEG, sleep position all to detect some form of sleep state).

With respect to claim 76, Miles discloses a mask further comprising an EMG sensor (chin; Col. 7, lines 39 and 40). Miles does not explicitly disclose EMG sensor coupled to the nasal mask. However, it should be noted that Miles discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based upon the disclosure of Miles that sensors, including an EMG (chin) sensor, may be placed inside the mask or connected to the mask thereby providing an alternative placement of the sensor.

With respect to claim 79, Miles discloses a nasal ventilation system comprising a nasal mask (3, 26) for monitoring a patient during gas delivery comprising a body (Fig. 2 above) having an internal surface (Fig. 2 above, since mask is shown to be cupping the

Art Unit: 3743

nose), an external surface (Fig. 2 above), and a perimeter surface (Fig. 2 above) shaped to form a seal around the patient's nose; and at least one EEG sensor (Col. 4, lines 33-35, 44,45, and lines 55-59; Col. 5, lines 6-15; Col. 7, lines 37-51 which disclose a plurality and variety of sensors including an EEG sensor and further disclose that the sensors may be mounted inside the mask or connected to the mask and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to couple the EEG sensor to the body as providing an alternative placement for the sensors, which sensor would be capable of being positioned on a top portion of a patient's head upon application of the body to a patient), an EMG sensor (Col. 7, lines 39 and 40) located on the perimeter surface, and a computer (25) in communication with the EEG and EMG sensor, the computer adapted to determine sleep state (Col. 4, lines 32-66; please note the Examiner considers breathing sounds, overall physical movement, leg movement, eye movement, EEG, sleep position all to detect some form of sleep state). Miles discloses essentially all of the limitations except for a headgear adapted to retain the body on the patient's head, the headgear having at least one EEG sensor positioned thereon. Brown teaches the use of a headgear with sensors placed strategically thereon so that the particular bodily condition of the user may be sensed. Therefore, it would have been obvious to one of ordinary skill in the art to provide a headgear in the breathing mask of Miles so that the specific body sensors such as an EEG sensor may be placed strategically on the appropriate anatomy of the human being to sense that specific bodily condition as taught by Brown. Furthermore, it would have been obvious to one of ordinary skill in the art that an EEG sensor be placed on or

Art Unit: 3743

near the head to detect the appropriate signal and as such it would have been further motivation to provide the EEG sensor on a headgear type device (as taught by Brown) to hold the sensors in place in conjunction with the mask.

With respect to claim 80, the above combination discloses a system further comprising a gas delivery system in communication with the computer (25) and coupled to the mask. As to the recitation of "pneumatically," it should be noted that in a device/apparatus claim, patentable weight is given to the end product not the process. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production, if the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F.2d 695, 698 USPQ 964, 966 (Fed. Cir, 1985) (citations omitted).

With respect to claim 81, the above combination discloses a system wherein an output of the gas delivery system is controlled by the patient's sleep state.

With respect to claim 82, the above combination discloses a system further comprising a sensor located on the external surface for determining if a patient is breathing through his mouth (Col. 4, lines 33-35, 44, 45, and 55-59; Col. 5, lines 6-15; Col. 7, lines 37-51 which disclose a plurality and variety of sensors and further discloses that the sensors may be mounted inside the mask or connected to the mask).

With respect to claim 83, the above combination discloses a system further comprising a flow sensor located on the internal surface (Col. 4, lines 33-35 and Col. 5,

Art Unit: 3743

lines 20 and 21). It should be noted that in Col. 5 lines 20 and 21, Miles discloses a flow sensor contained within the CPAP device; however, Miles also discloses that some of the sensors may be mounted inside or connected to the mask (Col. 4, lines 44 and 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention and based on the disclosure by Miles that the sensors, including a flow sensor, may be placed inside the mask or connected to the mask thereby providing alternative placement of the sensor.

Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miles (5,353,788) in view of Brown (6,000,395) and further in view of Bornn (5,353,793).

With respect to claim 67, Miles/Brown teach essentially all of the limitations except for wherein a portion of the perimeter is comprised of a conductive carbonized rubber material. It should be noted the Bornn teaches the use of physiological sensors such as EEG, piezoelectric sensors for monitoring respiration and pulse, temperature sensors, and activity and position sensor, which come into contact with the patient's skin. Bornn further provides a conductive carbonized rubber material (Col. 7, lines 34-37 of Bornn) for providing electrical contact between a person's skin and the sensor. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a portion of the perimeter surface with a conductive carbonized rubber material as taught by Bornn to provide an electrical contact between a person's skin and the sensor since Miles discloses that the sensor may be mounted inside the mask (which would include a portion of the perimeter surface).

Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miles (5,353,788) in view of Brown (6,000,395) and further in view of Wiesmann et.al. (6,199,550).

Miles and Brown teach essentially all of the limitations except for the mask further comprising a patient recycled air detection system positioned on the internal surface. Wiesmann teaches a mask with sensors including a sensor, which monitors exhaled carbon dioxide (Col. 5, line 42) located on the internal surface of the mask (Fig. 3). It should be noted that the sensor of Wiesmann is equivalent in scope to the recycled air detection system of Applicant since Applicant on page 10 of the specification disclose that the air detection system has a sensor that detects the amount of expired air from the patient remaining in the mask. The Wiesmann sensor monitors the exhaled carbon dioxide and would also indirectly detect any remaining exhaled air in the mask since the Wiesmann sensor is located on the interior of the mask. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a sensor that monitors exhaled carbon dioxide in the mask of Miles as taught by Wiesmann so that the amount of air exhaled by the patient would be detected by the sensor and indirectly measure the exhaled air remaining in the mask.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3743

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teena Mitchell whose telephone number is (571) 272-4798. The examiner can normally be reached on Monday-Friday however the examiner is on a flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/465,054

Page 19

Art Unit: 3743



Teena Mitchell
Primary Examiner
Art Unit 3743
May 13, 2006

TKM
TKM